THIS MEMO IS EXPIRED

December 5, 2000

M E M O R A N D U M NO. 34-00:

TO: **DISTRICT CONSTRUCTION ENGINEERS**

FROM: Greg Xanders, State Construction Engineer

COPIES: Charles Goodman, Archie Montgomery, Area Construction Engineers

SUBJECT: **IMPLEMENTATION OF REVISED FRICTION COURSE LIMITS (ON SHOULDERS OF LIMITED ACCESS FACILITIES)**

Effective immediately, please implement the change involved in reducing the distance between the rumble strip and the edge of the travel lane from 16 inches to 12 inches, as defined in Billy Hattaway's memorandum dated November 27, 2000 (see attached copy).

The extension of the friction course onto the shoulder is reduced from the current 1' to 8", resulting in 4" less friction course adjacent to each rumble strip. Please adjust friction course payment to reflect the decrease in friction course quantities.

Should you have any questions, please advise.

GX/mc
Attachments

Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, Florida 32399-0450

THOMAS F. BARRY, JR.
SECRETARY

DATE: November 27, 2000

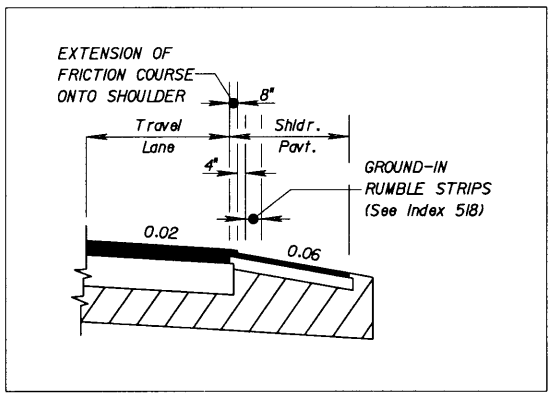
TO: Greg Xanders, State Construction Engineer

FROM: Billy Hattaway, State Roadway Design Engineer

CC: District Design Engineers, Freddie Simmons, Bill Albaugh, Jim Mills, Bruce Dietrich, Duane Brautigam, and Sharon Holmes

SUBJECT: Implementation of Revised Friction Course Limits (on Shoulders of Limited Access Facilities)

As a result of the request from Freddie Simmons on November 20, 2000, the Roadway Design Office has revised the *Roadway and Traffic Design Standards*, Index No. 518 (Rumble Strips, copy attached). This change involves a reduction in the distance between the rumble strip and the edge of the travel lane from 16 in. to 1 ft. To maintain the 4" clearance between the edge of the friction course and the rumble strip, the limits of friction course on limited access facility shoulders (Section 2.3.1, Plans Preparation Manual, Volume I) are being revised. The extension of the friction course onto the shoulder is being reduced from 1 ft. to 8 in. as shown in the figure below.

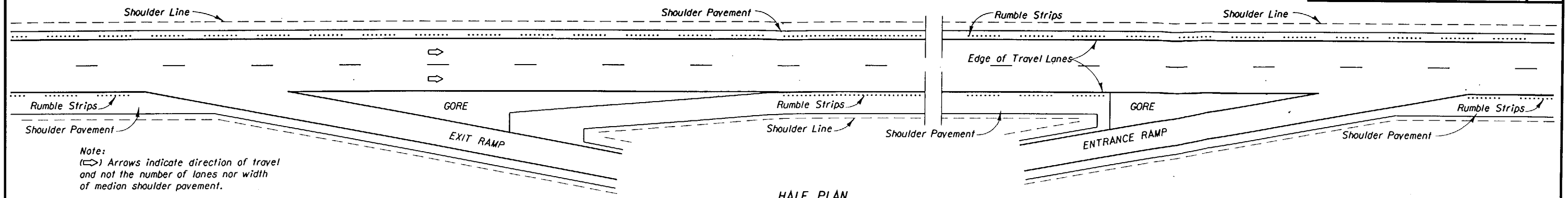


SHOULDER DETAIL

Implementation of these standards and criteria may be immediate, as called for by the engineer. If you have any questions please contact me.

BH/RQ/kn

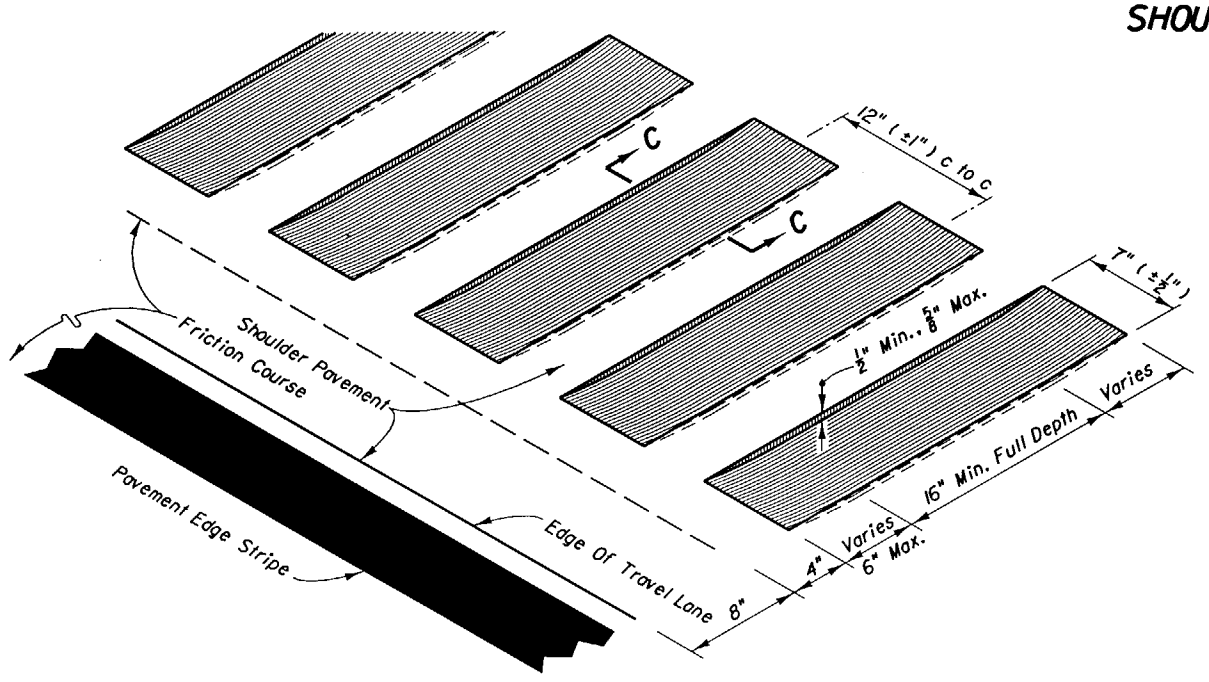
FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.



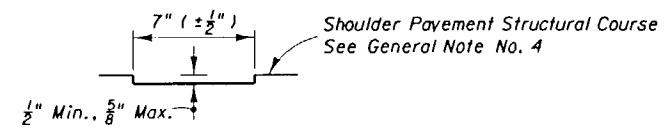
Note:
(⇨) Arrows indicate direction of travel and not the number of lanes nor width of median shoulder pavement.

HALF PLAN
LIMITED ACCESS FACILITIES

SHOULDER GROUND-IN RUMBLE STRIP PLACEMENT

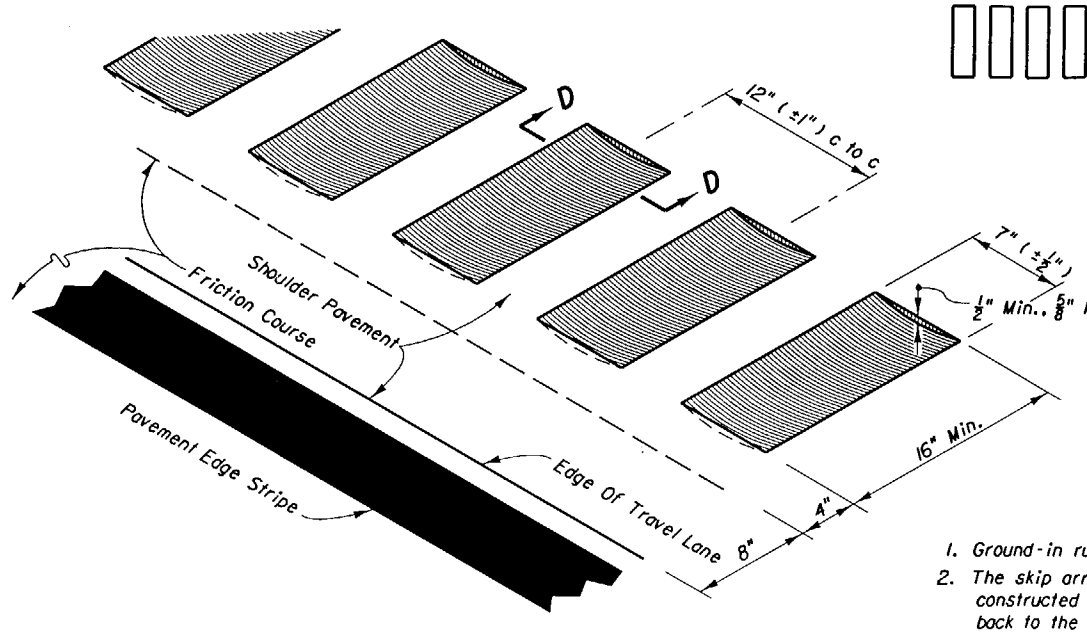


ISOMETRIC - TRANSVERSE CUT

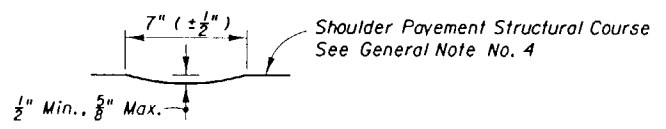


SECTION CC

TRANSVERSE CUT

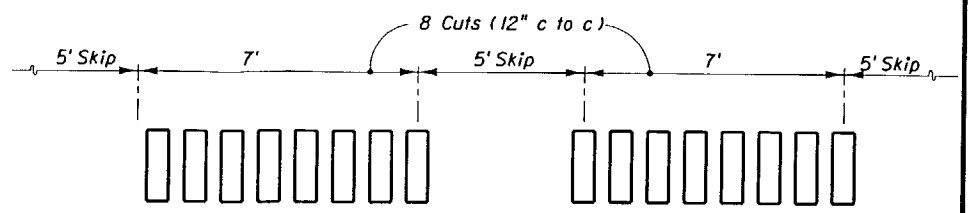


ISOMETRIC - LONGITUDINAL CUT



SECTION DD

LONGITUDINAL CUT



SKIP ARRAY

Continuous Cuts (12" c to c)

CONTINUOUS ARRAY

ARRAYS

GENERAL NOTES FOR SHOULDER GROUND-IN RUMBLE STRIPS

1. Ground-in rumble strips shall be constructed on limited access facilities.
2. The skip array is the standard array. The continuous array shall be constructed in advance of bridge ends for a distance of 1000', or back to the gore recovery area for mainline interchange bridges; and constructed at other specific locations as called for in the plans.
3. Ground-in rumble strips are to be constructed in accordance with Section 546 of the Specifications.
4. When friction course extends more than 8" beyond the edge of the travel lane, the extended friction course shall be bladed off back to the 8" line, prior to rumble strip grinding.
5. Both arrays shall be paid for under the contract unit price for Rumble Strips (Ground-In), PM. Such price and payment shall be full compensation for all work and materials required.

DESIGN NOTE

1. The rumble strips described on this sheet are intended for use on flexible pavement shoulders. When constructing ground-in rumble strips on existing rigid (concrete) shoulders, no rumble strips shall be located closer than 6" from any pavement joint. When specifying ground-in rumble strips on existing rigid shoulders their location and array shall be detailed in the plans.
2. Other methods and types of applications shall not be used unless approved in writing by the State Roadway Design Engineer. Approval will be considered only with sufficient documented justification for variance from this standard.

LOCATION ALONG SHOULDER (FLEXIBLE PAVEMENT)

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

INTERIM STANDARD IN ENGLISH UNITS APPLICABLE TO ROADWAY AND TRAFFIC DESIGN STANDARD BOOKLETS PUBLISHED IN EITHER ENGLISH OR METRIC UNITS.

SHOULDER GROUND-IN RUMBLE STRIPS

REVISED 11/27/00

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RUMBLE STRIPS

INTERIM STANDARD

THIS SHEET REPLACES SHEET 2 OF 2 OF INDEX 518 OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLETS DATED JANUARY 2000

APPROVED BY
State Roadway Design Engineer

REVISION NO.	SHEET NO.	INDEX NO.
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